



CURRENT CLAIM LIST

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Original) A method for assessing conditions, comprising the steps of:
  - collecting real-time condition data indicative of conditions from at least one sensor at a particular location;
  - collecting real-time position data indicative of the location of the sensor;
  - repeating the steps of collecting the real-time condition data and the real-time position data over time at one or more locations; and
  - correlating the collected real-time condition data with the collected real-time position data to produce correlated data indicative of conditions at the one or more locations over time.
2. (Original) The method of claim 1, wherein the data collected from the sensor is data indicative of internal conditions of a user or object.
3. (Original) The method of claim 1, wherein the data collected from the sensor is data indicative of environmental conditions.
4. (Original) The method of claim 1, wherein the data collected from the sensor is data indicative of exposure.
5. (Original) The method of claim 1, further comprising mapping sensor data at the one or more locations over time based on the correlated data.
6. (Original) The method of claim 1, further comprising determining, based on the sensor data, risks of hazardous conditions associated with the one or more locations over time.
7. (Original) The method of claim 1, further comprising activating an alarm when the sensor data approaches a hazardous condition threshold.
8. (Original) The method of claim 1, further comprising analyzing the correlated data to determine conditions at the one or more locations over time.

9. (Original) The method of claim 8, wherein the step of analyzing includes selecting at least a portion of the collected data for analysis.
10. (Original) The method of claim 9, wherein the step of selecting selects data within at least one of the following: a particular range of sensed levels, a particular range of locations, a particular time period, and a particular range of accuracy of the position data.
11. (Original) The method of claim 8, wherein the step of analyzing including producing data indicative of the accuracy of the collected position data.
12. (Original) The method of claim 8, wherein the step of analyzing is performed using statistical analysis software or geographical information system software.
13. (Original) The method of claim 8, wherein the step of analyzing includes generating at least one of: descriptive statistics of sensor distributions, descriptive statistics of log-transformed sensor distributions, depictions of sensor frequency distributions, depictions of sensor values over time, depictions of sensor values at various locations, and depictions of locations where data were collected.
14. (Original) The method of claim 13, wherein the step of analyzing further includes producing a summary of generated data in the form of at least one of: a spreadsheet, a word processor file, and an internet web page.
15. (Original) The method of claim 10, wherein the condition data is collected from a plurality of co-located sensors, and the step of selecting selects data collected by one or more of the sensors for analysis.
16. (Original) The method of claim 1, wherein the real-time position data is global positioning system (GPS) data.
17. (Original) The method of claim 1, further comprising correcting the position data.

18. (Original) The method of claim 17, wherein the step of correcting the position data is performed in real time with differential global positioning system (DGPS) data received using telemetry or with data received using a wide area augmentation system (WAAS).
19. (Original) The method of claim 1, further comprising logging the correlated data to a memory.
20. (Original) The method of claim 1, further comprising transmitting the correlated data in real time using telemetry.
21. (Original) The method of claim 1, wherein the sensor is portable, and the steps of collecting real-time condition data and real-time position data are performed at various locations over time.
22. (Original) An apparatus for generating data indicative of conditions, comprising:
  - at least one sensor for collecting real-time condition data indicative of conditions at a particular location;
  - a receiver for collecting real-time position data indicative of the location of the sensor, wherein the real-time condition data and the real-time position data are collected at one or more locations over time;
  - a correlator for correlating the collected real-time condition data with the collected real-time position data to produce correlated data indicative of conditions at the one or more locations over time.
23. (Original) The apparatus of claim 22, wherein the data collected from the sensor is data indicative of internal conditions of a user or object.
24. (Original) The apparatus of claim 22, wherein the data collected from the sensor is data indicative of environmental conditions.
25. (Original) The apparatus of claim 22, wherein the data collected from the sensor is data indicative of exposure.

26. (Original) The apparatus of claim 22, wherein an alarm is activated when the sensor data approaches a hazardous condition threshold.
27. (Original) The apparatus of claim 22, wherein the receiver receives global positioning system (GPS) data.
28. (Original) The apparatus of claim 22, further comprising means for correcting the position data.
29. (Currently Amended) The apparatus of claim 28, wherein the position correcting means includes a telemetry receiver that receives differential global positioning system (DGPS) data or means for receiving correction data using a wide area augmentation system (WAAS)[.]for correcting the position data in real time.
30. (Original) The apparatus of claim 22, further comprising a memory for logging the correlated data.
31. (Original) The apparatus of claim 22, further comprising a telemetry transmitter for transmitting the correlated data in real time.
32. (Original) The apparatus of claim 22, wherein the apparatus is portable, and the real-time condition data and the real-time position data are collected at various locations over time.
33. (Original) The apparatus of claim 22, further comprising a rechargeable battery.
34. (Original) The apparatus of claim 22, wherein the apparatus is wearable.
35. (Original) An apparatus for analyzing data indicative of conditions, comprising:
  - a receiver for receiving data including real-time condition data indicative of conditions collected from at least one sensor at a particular location correlated with real-time position data indicative of the location of the sensor, wherein the condition data and the position data are collected at one or more locations over time; and

a processor for analyzing the received data to determine conditions at the one or more locations over time.

36. (Original) The apparatus of claim 35, wherein the data collected from the sensor is data indicative of internal conditions of a user or object.

37. (Original) The apparatus of claim 35, wherein the data collected from the sensor is data indicative of environmental conditions.

38. (Original) The apparatus of claim 35, wherein the data collected from the sensor is data indicative of exposure.

39. (Original) The apparatus of claim 35, wherein the processor maps a sensor level at the one or more locations over time based on the correlated data.

40. (Original) The apparatus of claim 35, wherein the processor determines, based on the sensor data, risks of hazardous conditions at the one or more locations over time.

41. (Original) The apparatus of claim 35, wherein an alarm is activated when the sensor data approaches a hazardous conditions threshold.

42. (Original) The apparatus of claim 35, further comprising a selector for selecting at least a portion of the received data for analysis.

43. (Original) The apparatus of claim 42, wherein the selector selects data within at least one of the following: a particular range of sensed levels, a particular range of locations, a particular time period, and a particular range of accuracy of the position data.

44. (Original) The apparatus of claim 35, wherein the processor produces data indicative of the accuracy of the collected position data.

45. (Original) The apparatus of claim 35, wherein the processor analyses the received data using statistical analysis software or geographical information system software.

46. (Original) The apparatus of claim 35, wherein the processor generates at least one of: descriptive statistics of sensor distributions, descriptive statistics of log-transformed sensor distributions, depictions of sensor frequency distributions, depictions of sensor values over time, depictions of sensor values at various locations, depictions of locations where data were collected.

47. (Original) The apparatus of claim 46, wherein the step of analyzing further includes producing a summary of generated data in the form of at least one of: spreadsheets, a word processor file, and an internet web page.

48. (Original) The apparatus of claim 42, wherein the condition data is collected from a plurality of co-located sensors, and the selector selects condition data collected from one or more sensors for analysis.